

WHAT IS CLAIMED IS:

1. A data format conversion method comprising the step of converting a program of a first data format to a program of a second data format on the basis of a conversion rule designated by a convert direction of a data format contained in input information containing the program of the first data format.
2. A data format conversion method as defined in claim 1, wherein said convert direction designates one of a plurality of conversion rules for executing conversion to a plurality of different second data formats in such a fashion as to correspond to at least one first data format.
3. A data format conversion method as defined in claim 1, wherein said conversion rule is acquired through a communication network.
4. Data format conversion equipment comprising a computer, said computer constituting:
 - reception means for acquiring input information containing a program of a first data format from a communication network;
 - direction extract means for extracting a convert direction of a data format contained in said input information so acquired;
 - data conversion rule acquisition means for acquiring a conversion rule of a data format corresponding to said convert direction extracted;
 - convert execution means for converting the

program of the first data format to a program of a second data format on the basis of said conversion rule acquired; and

transmission means for outputting the converted program to said communication network.

5. Data format conversion equipment as defined in claim 4, which further comprises memory means for storing a conversion rule for converting the program of the first data format to the program, etc, of the second data format, wherein said memory means stores a plurality of conversion rules for executing conversion to a plurality of different second data formats in such a manner as to correspond to at least one first data format, and said data conversion rule acquisition means acquires a conversion rule corresponding to said convert direction from said memory means.

6. Data format conversion equipment as defined in claim 5, wherein said data conversion rule acquisition means acquires said conversion rule stored in memory means provided outside from said communication network through said reception means.

7. Data format conversion equipment as defined in claim 6, wherein said memory means provided outside is memory means connected to said communication network in such a manner as to be capable of communication, or memory means provided to a controller having an embedded computer connected to said communication network in such a manner as to be capable of

communication.

8. Data format conversion equipment as defined in claim 4, wherein said conversion rule is a conversion program for converting the first data format to the second data format, and said convert execution means converts the program of the first format to the second data format in accordance with said conversion program.

9. Data format conversion equipment comprising a computer, said computer constituting:

communication means for acquiring input information containing a program, etc, of a first data format from a communication network;

direction extract means for extracting a convert direction of a data format contained in said input information so acquired;

data conversion rule acquisition means for acquiring a conversion program for executing conversion to a data format corresponding to the convert direction so extracted from outside through said communication means; and

convert execution means for converting the program of the first data format to a program of a second data format on the basis of said conversion program so acquired, and outputting the converted program to said communication network through said communication means;

wherein said conversion program converts the

program to a program of a third data format different from the first and second data formats, and then converts the program to the second data format.

10. Data format conversion equipment as defined in claim 9, wherein said data conversion rule acquisition means gains access to memory means provided outside through said reception means and acquires said conversion program from said communication network.

11. Data format conversion equipment as defined in claim 9, wherein said convert execution means comprises a virtual machine and intermediate conversion means for converting a program etc, to a third data format.

12. Data format conversion equipment as defined in claim 11, wherein said virtual machine is a virtual machine of Java.

13. A programming apparatus comprising a computer for creating a program by a first data format and creating a message adding convert direction for converting the program so created to a second data format.

14. A programming apparatus comprising a computer, said computer constituting program creation means for creating a program of a first data format, and communication means for outputting a message having added thereto convert direction for converting the program so created to a second data format to a communication network.

15. A programming apparatus as defined in claim 14, which further comprises input means for inputting convert direction for converting the program of the first data format to a second data format.

16. A programming apparatus as defined in claim 13, wherein said computer is a computer embedded to a mobile communication terminal.

17. A controller for controlling a controlled target in accordance with a predetermined program of a second data format, comprising a computer, said computer constituting memory means for storing a program of a first data format inputted through a communication network, and a function of outputting the program of the first data format stored in said memory means in response to a request inputted through said communication network.

18. A controller management system comprising:
a controller including a computer for controlling a controlled target in accordance with a control program of a second data format stored in memory means; and

a controller management apparatus so provided as to be capable of communicating with said controller through a communication network;

said controller management apparatus including:

a programmer unit for creating a control program of said controller by a first data format; and

a data format converter for inputting the program of the first data format created by said programmer unit, converting the program to a program of a second data format and outputting the program to said controller.

19. A controller management system as defined in claim 18, wherein said programmer unit and said data format converter are connected to each other through a communication network.

20. A controller management system as defined in claim 18, wherein said programmer unit includes input means for inputting conversion instruction for converting the program of the first data format to a second data format, and outputs a message having the convert direction added to the program of the first data format to said data format converter.

21. A controller management method for managing a controller having a computer for controlling a controlled target in accordance with a control program of a second data format, comprising the steps of creating a control program of said controller by a first data format, and outputting the first program of the first data format so created through a data format converter for converting the program of the first data format to a program of the second data format.